

Claims

1. A method for identifying compounds which inhibit, prevent or otherwise disturb
5 the interaction between Hrp65 and actin, comprising the steps of;
(a) providing an Hrp65 molecule,
(b) adding an actin molecule to said Hrp65 molecule, thereby forming a complex
between actin and Hrp65,
(c) adding a test compound to said complex,
10 (d) determining the effect of said test compound on said complex.
2. A method according to claim 1, in which the test compound is added in step (a) or
(b), together with the Hrp65 molecule or actin molecule, respectively.
- 15 3. A method for identifying compounds which inhibit the interaction between actin
and Hrp65, comprising the steps of;
(a) conjugating Hrp65 to a solid support, such as a bead, resin, surface, or in a well
in a multiwell plate,
(b) removing any non-conjugated Hrp65,
20 (c) blocking non-conjugated sites on the solid support by adding another protein,
such as bovine serum albumin or milkpowder,
(d) adding labeled actin to the solid support conjugated Hrp65,
(e) removing actin which has not bound to conjugated Hrp65,
(f) optionally calculating the amount of formed actin/Hrp65 complexes,
25 (g) adding a test compound,
(h) collecting and measuring the amount of displaced actin,
in which method the conjugated molecule may be actin, in which case the labeled
molecule is Hrp65.

4. A method according to claim 3, in which the amount of labeled actin or Hrp65 remaining bound to the conjugated protein is measured, e.g. by immunochemical methods, after step (h).
5. A compound identified by the method according to claims 1-4.
6. A compound according to claim 5 for medical use.
7. Use of a compound according to claim 5 for the manufacture of a medicament to be used in the treatment of hyperproliferative diseases.
8. A compound comprising the amino acid sequence CPYVNQXPQX (SEQ ID NO 5), in which X may be any amino acid.
9. A compound comprising the amino acid sequence CPYVNQXPQX (SEQ ID NO 5), in which X may be any amino acid, which has an inhibiting effect on the interaction between actin and Hrp65.
10. A compound comprising the amino acid sequence CPYVNQXPQX (SEQ ID NO 5), in which X may be R or K, which has an inhibiting effect on the interaction between actin and Hrp65.
11. A compound comprising the amino acid sequence CPYVNQXPQXAXYXNG (SEQ ID NO 6), in which X may be any amino acid, preferably arginine or lysine or alanine, or analogues or oligomers thereof, fragments thereof, or oligomers thereof, or a polypeptide having at least 80% similarity, preferably at least 90% similarity, more preferably at least 95%, further more preferably at least 96%, even more preferably at least 97%, or most preferably at least 98% similarity to said compound, or more preferably at least 80% identity, preferably at least 90% identity, more preferably at least 95%, further more preferably at least 96%, even more preferably at least 97%, or most preferably at least 98%, identity to said

compound, whereby said compound has an inhibiting effect on the interaction between actin and Hrp65.

12. A compound chosen from the group comprising; a polypeptide according to SEQ ID NO 1 or SEQ ID NO 3, which has an inhibiting effect on the interaction between actin and Hrp65.

13. A compound according to claim 9-12, in which the compound is the polypeptide shown in SEQ ID NO 1, which has an inhibiting effect on the interaction between actin and Hrp65.

14. A compound according to any of claims 9-12, which has an anti-proliferative effect.

15. A compound according to any of claims 9-14, for medical use.

16. Use of a compound according to any of claims 9-14, for the manufacture of a medicament to be used in the treatment of hyperproliferative diseases.

17. Use according to claim 16, wherein the condition to be treated is chosen from the group comprising; melanoma, non-small-cell lung cancer, small-cell lung cancer, lung cancer, hepatocarcinoma, retinoblastoma, astrocytoma, glioblastoma, leukemia, neuroblastoma, cancer in the gum, tongue, head, neck, breast, pancreas, prostate, kidney, bone, testicle, ovary, mesothelia, cervix, gastrointestinal tract, lymphoma, brain, colon, sarcoma, bladder, rheumatoid arthritis, inflammatory bowel disease, osteoarthritis, leiomyomas, adenomas, lipomas, hemangiomas, fibromas, vascular occlusion, stenosis, atherosclerosis, pre-neoplastic lesions, adenomatous hyperplasia, prostatic intraepithelial neoplasia, carcinoma in situ, oral hairy leukoplakia, or psoriasis.

18. A pharmaceutical composition comprising a compound according any of claims 9-14 together with pharmaceutically acceptable excipients and additives.

19. Use of a compound according to any of the claims 9-13 in an assay in which
5 transcription of DNA into RNA is inhibited by said compound.

20. Use of a compound according to any of the claims 9-14, for protein transduction.